August 19.

The President, Dr. Ruschenberger, in the chair.

Twenty-three persons present.

August 29.

The President, Dr. Ruschenberger, in the chair.

Fourteen persons present.

September 2.

The President, Dr. Ruschenberger, in the chair.

Twenty persons present.

September 5.

The President, Dr. Ruschenberger, in the chair.

Thirty-eight persons present.

A paper entitled "Description of a New Branchipod," by John A. Ryder, was presented for publication.

On Myrmecocystus Mexicanus, Wesm.—Rev. H. C. McCook exhibited several glass formicaries containing a large number of living specimens of the honey ant, *Myrmecocystus Mexicanus*, Wesmael. These embraced three worker castes, major, minor, and dwarf, the honey-bearer, and the fertile queen. The artificial nests had been brought from the Garden of the Gods, Colorado, where the honey-ant had been discovered by Mr. McCook. They had previously been supposed to be confined to a more southern latitude. The nests are found on the tops or southern slopes of ridges. In exterior architecture they are small gravel-covered moundlets, truncated cones, pierced in the centre by a gate, or perpendicular opening from three to six inches deep. The interior architecture was illustrated by numerous specimens brought from excavated nests. It consists of a series of underground galleries and chambers, cut through the gravel and sandstone to the distance of nearly eight feet in length, two to four feet beneath the surface, and about ten to twelve inches in width at the widest part.

The honey-bearers were found hanging in groups to the roofs of

the honey chambers by their feet; their large globular abdomens looking like bunches of small Delaware grapes. About eight to ten chambers, containing each an average of about thirty honey-bearers, were found. The workers cared for the honey-bearers when the chambers were opened, and dragged them into the unopened parts.

The ants proved to be nocturnal in their habits, remaining within doors until after sunset, about 7.30 P. M., each evening, when the workers issued forth in column, and dispersed among the clumps of scrub oak, *Quercus undulata*. Here they sought the galls made by a species of *Cynips*, which grows abundantly on the bushes, and licked therefrom a sweet exudation which issued in small transparent beads from the surface. From 11.30 P. M. to about 3.30 A. M., when the first streakings of dawn began to appear, the workers returned home laden with the honey. This appears to be fed to the sedentary honey-bearers by disgorging it in the usual way, and remains within the globular abdomens as a store for future use. The economy of this habit appears to resemble that of the bee; the exception being that the bee's honey is stored within the inorganic substance of a waxen cell, while the ant's is lodged within the organic tissue of the living insect.

The above is a brief abstract of observations presented in detail, together with others not here referred to, which will appear in full in subsequent reports of the Academy's Proceedings.

Notices of some Animals on the Coast of New Jersey.—Prof. Leidy exhibited a valve of the beach-clam, *Mactra solidissima*, which he picked up among the numerous dead and bleaching shells of Brigantine Beach, N. J. It attracted his attention from its apparently having a fungus growing upon it. The fungus-like excrescence presented a remarkable resemblance to a *Polyporus* growing from the stem of a tree. It is an outgrowth from the lip of the shell, evidently dependent on an abnormal condition of the mantle of the living animal.

Prof. Leidy also stated that he had picked up on the beach at Atlantic City, N. J., another valve of the beach-clam, which had been recently cast on shore. The inner surface of the shell was covered with a multitude of the beautiful ciliated infusorian, *Freia ampulla*. The little creatures were still alive, and their curved, flask-like cases were of a deep green color.

Prof. Leidy further remarked that while at Atlantic City, Mr. Philips had directed his attention to two interesting animals, recently collected. One of these he recognized as the *Bicidium parasiticum*, a parasitic anemone or Actinia, found on the large jelly fish, *Cyanea arctica*, so frequently thrown on shore. The other was a parasite of the shrimp, *Palæmonetes vulgaris*, which he recognized as the curious Isopod, *Bopyrus*. Many of the shrimps were infested with the parasite, the presence of which